

**ARCUCORNUS, A NEW GENUS IN THE PSILOMORPHINI
(COLEOPTERA: CERAMBYCIDAE: CERAMBYCINAE)
WITH TWO NEW SPECIES**

D.J. SCAMBLER

Department of Entomology, The Australian Museum, College Street, Sydney, NSW 2000

(Present address: 1 Bernard Street, Ballina, NSW 2478)

Abstract

Arucornus gen. nov. is erected in the cerambycid tribe Psilomorphini for *A. occidentalis* sp. nov. and *A. orientalis* sp. nov., described from unique specimens from southern Western Australia and far northern Queensland respectively.

Introduction

Representatives of the endemic Australian tribe Psilomorphini are rare. In a revision of the genus *Psilomorpha* Saunders, Scambler (1989) noted that of the 7 species described, only 217 specimens had been located, these having been collected over a period of 150 years. Similarly, with *Ischnauchen* Scambler, a genus assigned to Psilomorphini by Scambler (1993), only 14 specimens were recorded. Another new genus, *Arucornus*, with two new species is now proposed. Each species is known by a unique specimen.

***Arucornus* gen. nov.**

(Figs 1-2)

Type species *Arucornus occidentalis* sp. nov.

Diagnosis. Body length 25-30 mm, slender, elongate. Head large, nitid, with obtusely triangular profile in sagittal plane and with short to medium length, parallel-sided, moderately deflexed muzzle. Mandibles large, curved, sharp, margins and apices black. Maxillary and labial palpi prominent, subequal in length, setose. Eyes very prominent, large, slightly to fully pyriform, coarsely granulate. Antennae slender, equal to body length, inserted on well-separated, prominent tubercles, scape apically incrassate, approximately equal in length to next three segments together, basal segments with a line of, or fully clothed with long, very fine, erect setae. Defensive secretory 'pit and tongue' mandibular organs absent. Prothorax with two pairs of dorsal tubercles of varying prominence and laterally with single, very prominent, markedly dorsally arcuate, aculeate tubercles. Scutellum medium-large, amber, depressed, apically rounded. Elytra *ca* 0.7 body length, gradually tapered, yellow to buff, shoulders brown. Disc flat, with three or four slightly raised costae and suture. Inter-costal areas mostly amber, with one or two areas darker and with dense, recumbent, very short, very fine vestiture. Legs long, slender.

Etymology. Derived from the Latin *arcus*: curve, bow; *cornus*; horn.

Discussion. Characters of *Arcucornus* which place it in the tribe Psilomorphini are: yellowish-brown coloration, sometimes with distinctive markings; elongate, gracile form; prominent muzzle and eyes; tapering, costate elytra and long, slender legs. The absence of defensive, secretory 'pit and tongue' organs on the head described by Moore and Brown (1971) distinguishes *Arcucornus* and other psilomorphines from the genera *Stenoderus* Dejean (= *Stenocentrus* McKeown) and *Syllitus* Pascoe in the closely related tribe Stenoderini. The primary characters separating *Arcucornus* from other genera of the Psilomorphini so far described, are its size, which is twice the length of the largest specimen from any other genus, the unique structure of its lateral prothoracic tubercles and its intercostal coloration.

The type species was bred from Western Australian Karri, *Eucalyptus diversicolor* F. Muell. by R.P. McMillan of Denmark, W.A., who states that no other specimens were bred or collected (pers. comm.). Nothing is known of the biology of the second species from far north Queensland.

Key to males of species of *Arcucornus*

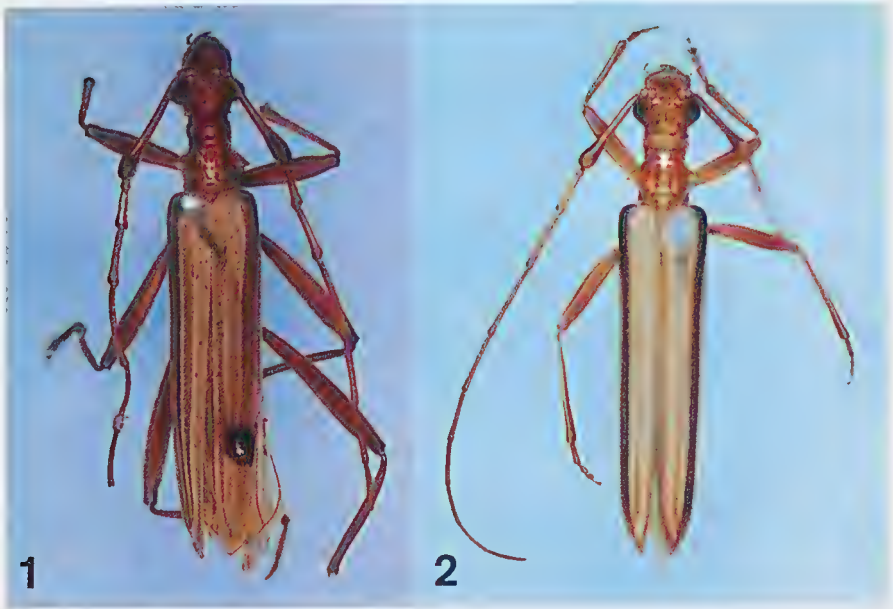
- Elytra each with 4 costae; head with long, erect, fine setae ventrally,
 on frons, mandibles; antennal scape apically darker than base;
 basal antennal segments setaceous radially; area between costae 3
 and 4 darker than background, less so apically; elytral apices
 rounded *occidentalis* sp. nov.
- Elytra each with 3 costae; head glabrous except for recumbent setae
 on labrum; antennal scape unicolorous; basal antennal segments
 with a line of setae on one side; area between costae 2 and 3 dark
 brown basally, becoming lighter apically, elytral apices pointed
 *orientalis* sp. nov.

Arcucornus occidentalis sp. nov.

(Fig. 1)

Type. Holotype ♂, WESTERN AUSTRALIA: Denmark, as larva in Karri, 20.v.1973, pupa 6.vii.1973, adult 11.ix.1973, R.P. McMillan (in Western Australian Museum Collection, 94/846).

Description. Male. Overall length 30 mm. Head *ca* 1.5 times as long as prothorax, ventrally rugulose, tapering to prothorax immediately behind eyes, with long, erect, fine setae ventrally, on lateral margin of frons, dorsal base of mandibles and immediately posterior to eyes. Labrum with coarser, recumbent setae. Eyes slightly pyriform, well separated from ventral margins of antennal insertions, with fine, long, erect setae immediately postero-laterally. Antennae amber, scape apically darker, longer than next three segments together. Scape, pedicel and segment 3 somewhat sparsely setaceous radially, segments 4-6 setaceous on one side, remainder pruinose.



Figs 1-2. (1) *Arucornus occidentalis*, holotype male (dark object on right elytron is immovable foreign body); (2) *Arucornus orientalis*, holotype male. Scale line = 5 mm.

Segments 3-6 progressively longer, 7-8 progressively shorter (remainder missing). Prothorax amber, ventrally rugulose, anterior/posterior width ratio *ca* 0.8, with sparse, fine, erect setae antero-laterally, antero-dorsal tubercles prominent, postero-dorsal tubercles less so. Elytra with four costae, 1 and 2 clearly defined, integral with similarly formed carina at base of elytra. Costa 3 weaker, arising sub-humerally, costa 4 similar, arising posterior to 3 and becoming more strongly defined apically. All costae parallel, all joining preapically. Area between costae 2 and 4 darker than background, becoming less so apically. Elytral apices faintly rounded, margined with very short setae. Legs amber, forelegs with sparse, fine, erect setae, middle and rear tarsi with similar, sparser setae. Fore and mid-coxae globose, contiguous, rear coxae transverse, almost contiguous.

Female unknown.

Etymology. Derived from the Latin *occidentis*: west.

***Arucornus orientalis* sp. nov.**

(Fig. 2)

Type. Holotype ♂, QUEENSLAND: Kuranda, N.Q., 6.ix.1975, A. & M. Walford-Huggins (in Queensland Museum, QMT. 46010).

Description. Male. Habitus similar to *A. occidentalis*. Overall length 25 mm. Head *ca* 1.2 times as long as prothorax, glabrous except for sparse, recumbent setae on labrum. Muzzle rather short. Eyes pyriform. Antennae unicolorous, scape slightly shorter than next three segments together, basal segments with a line of fine, erect setae on one side. Segments 3-5 progressively longer, 6 and 7 shorter and equal, 8 shorter, 9-11 shorter than 8 and equal. Prothorax with single, fine, erect seta laterally on anterior margin, dorsal tubercles slightly and equally prominent. Elytra with 3 costae, costa 3 very weakly defined, becoming somewhat more defined apically. Area between costae 2 and 3 microtuberculate, dark brown basally, becoming slightly lighter apically. Elytral apices pointed.

Female unknown.

Etymology. Derived from the Latin *orientis*: east.

Acknowledgments

I thank Mr G. Daniels for his critical appraisal of the original manuscript and photographing the specimens, Dr M.J. Fletcher and Mr J.A. Macdonald for their continued support, Dr T.F. Houston and Miss M.A. Schneider for loan of specimens.

References

- MOORE, B.P. and BROWN, W.V. 1971. Chemical defence in longhorn beetles of the genera *Stenocentrus* and *Syllitus* (Coleoptera: Cerambycidae). *Journal of the Australian Entomological Society* 10: 230-232.
- SCAMBLER, D.J. 1989. A revision of genus *Psilomorpha* Saunders (Coleoptera: Cerambycidae: Cerambycinae). *Invertebrate Taxonomy* 3: 163-173.
- SCAMBLER, D.J. 1993. *Ischnauchen*, a new genus for *Aphiorhynchus costatus* McKeown (Coleoptera: Cerambycidae). *Journal of the Australian Entomological Society* 32: 193-195.